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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/694,599
Filing Date: October 27, 2003
Appellant(s): CLASSEN ET AL.

Russell W. Warnock
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed July 22, 2008 appealing from the Office action mailed Feb. 25, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,093,252	Cahill	6-1963
3,788,500	Lemelson	1-1974

4,736,971

McManus

4-1988

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-25, 27-29 & 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cahill (US 3,093,252) (previously cited) in view of Lemelson (US 3,788,500) (previously cited).

With respect to claims 19-25, 27-29 & 39, Cahill discloses an apparatus comprising:

- a conveying unit 20, 30 conveying a plurality of multi-piece goods units therein;
- conveying unit beam guide members 31 fixed to an overhead support structure;
- conveying unit unitary traveling support beam 40, 55 operatively connected to beam guide members for reciprocating travel;
- two gripping units 20, 30 operatively mounted to a unitary support beam 31 for movement therewith and disposed in spaced succession therealong, each gripping unit including
 - a laterally oriented crossbeam 40 (or 23, 23a, 27), and

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- two fixed length legs 24, 53, 54, 56 and being movable with respect to one another (C5/L10) and mounted to a crossbeam 40 (or 23, 23a, 27);
- two lifting units 62, 64, 66 (C4/L60-65) mounted to a crossbeam 40 for lifting multi-piece goods units in a generally vertical direction perpendicular to the loading and unloading direction for movement of the multi-piece goods units into and out of the transport compartment;

Cahill does not disclose a conveying unit inserted into a transport compartment.

Lemelson discloses rails 20, 21 that extend in to a transfer compartment (FIG. 4: 25)], a conveying unit having two gripping units 16 (C1/L38-39) disposed one after another [does not equate to two gripping units as part of a whole, i.e. that one gripping follows another in successive fashion], crossmember [e.g. the crossmember at the top of each gripping unit] and lifting units that lifts goods off a base in a vertical direction. Lemelson teaches automatic loading of cargo from an automatic warehouse to directly load into a vehicle eliminate a manual step. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Cahill to include a conveying unit inserted into a transport compartment, as per the teachings of Lemelson, to eliminate manual loading.

Claims 32-36 & 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cahill in view of Lemelson and further in view of McManus (US 4,736,971) (previously cited).

With respect to claims 32-36 & 38, Cahill discloses an apparatus comprising:

- a plurality of beam guide members fixed to an overhead support structure;
- a unitary traveling support beam 31 operatively connected to beam guide members and extending in a substantially horizontal direction for reciprocating travel;
- a crossbeam 40 extending in a direction substantially transverse to the support beam 31, mounted operatively thereto and having a first end and a second end disposed opposite a first end;
- a first leg 24, 53, 54, 56 connected to the first end of a crossbeam and extending downwardly in a substantially vertical direction from the crossbeam;
- a second leg 24, 53, 54, 56 connected to a second end of a crossbeam and extending downwardly in a substantially vertical direction from the crossbeam, first and second legs having respective length dimensions sufficient to extend beyond individual pieces of the multi-piece goods units and being movable toward one another to clamp the multi-piece goods units and away from one another to release the multi-piece goods units; and

Cahill discloses reciprocating movement and the ability to lift goods and does not disclose a hydraulic cylinder to lift and a conveying unit that extends into a transport compartment.

Lemelson discloses a unitary traveling support beam 15' operatively connected to beam guide members and extending in a substantially horizontal direction for reciprocating travel into and out of a transport compartment for depositing multi-piece goods units in a transport compartment or retrieving multi-piece goods units from the

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transport compartment. Lemelson teaches automatic loading of cargo from an automatic warehouse to directly load into a vehicle eliminate a manual step. C1.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Cahill to include a unitary traveling support beam, as per the teachings of Lemelson, to eliminate manual loading.

McManus discloses a support beam 13, crossbeam 20, first and second legs 28, 32, and a hydraulic cylinder 15 capable of lifting aluminum billets of varying size and configurations, e.g. more than one billet per lift. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Cahill to include a hydraulic cylinder, as per the teachings of McManus, to lift loads of varying size and quantity.

(10) Response to Argument

Claim Comparison Chart	
<u>Instant Application</u>	<u>Cited Prior Art</u>
Claim 19	
conveying unit	Cahill: FIG. 3: 30, 30 (two total) conveying a stack of units T
beam guide members	Cahill: FIG. 2: Indicated generally as W
overhead support structure	Cahill: FIG. 2: Indicated generally as W
horizontal unitary traveling support beam (connected to beam guide members)	Cahill: FIG. 2: 12, 31 (C3/L61-65)
horizontal unitary traveling support beam (connected to beam guide members) – extending into a transport compartment	Lemelson: FIG. 4: beam 21 supported on support 15S and supports two gripping units 16 (C1/L37-39) to extend (FIG. 4) into commercial truck 20; C6/L35-40.
transport compartment (receives traveling support beam)	Cahill: FIG. 2: X

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two gripping units (mounted to a support beam)	Cahill: FIG. 3: gripping units 30 move along traveling support beam 31. Lemelson: FIG. 4: two gripping units 16 (C1/L37-39) move along support beam 15, 21 in to and out of compartment 20.
gripping unit laterally oriented crossbeam	Cahill: FIGS. 5-7: 23
gripping unit elongate legs (mounted to a crossbeam)	Cahill: FIGS. 5-7: 24
two lifting units (mounted to a crossbeam)	Cahill: FIGS. 5-7: 27, 28 (providing clamping force which lifts articles from support K1)
Claim 32	
beam guide members	Cahill: FIG. 2: Indicated generally as W
overhead support structure	Cahill: FIG. 2: Indicated generally as W
horizontal unitary traveling support beam (connected to beam guide members)	Cahill: FIG. 2: 12, 31
transport compartment (receives traveling support beam)	Lemelson: FIG. 4: BEAM 21 supported on support 15S extends into commercial truck 20.
crossbeam (transverse to support beam)	Cahill: FIGS. 5-7: 23
fixed length elongate <u>first</u> leg (connected to a crossbeam; for clamping)	Cahill: FIGS. 5-7: 24
fixed length elongate <u>second</u> leg (connected to a crossbeam; for clamping)	Cahill: FIGS. 5-7: 24
hydraulic cylinder (connecting a crossbeam to a support beam)	McManus: FIG. 2: crossbeam 12 transverse to support beam 12, legs 28, 32, hydraulic cylinder 15.
Claim 39	
providing a conveying unit including a plurality of beam guide members fixed to an overhead support structure and a unitary traveling support beam operatively connected to the beam guide members and extending in a substantially horizontal direction for reciprocating travel into and	(see claim 19 above)

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out of the transport compartment for depositing the multi-piece goods units in the transport compartment or retrieving multi-piece goods units from the transport compartment, at least one gripping unit having a crossbeam and two fixed length elongate legs extending therefrom, said legs being movable with respect to one another to engage the multi-piece goods units, and at least one lifting unit mounted to said crossbeam and connecting the at least one gripping unit to the support beam;	
positioning the gripping unit adjacent the multi-piece goods units in at least one of the loading region and the transport compartment;	Cahill: C6/L22-25
engaging the multi-piece goods units with the gripping unit by moving the legs toward one another to clamp the multi-piece goods units and apply opposing forces on opposite sides of the multi-piece goods units;	Cahill: C4/L35-40
lifting the multi-piece goods units with a lifting unit;	Lemelson: C6/L3-41
moving the support beam, thereby transporting the gripping unit and the multi-piece goods unit to the other of the loading region and the transport compartment;	Cahill: C3/L61-65 (e.g. overhead cranes transverse zones C, D
lowering the multi-piece goods units back on the base with the lifting unit; and	Cahill: C4/L56-75
disengaging the multi-piece goods units from the gripping unit by moving the legs away from one another to unclamp the	Cahill: C4/L56-75

multi-piece goods units.	
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(10) Response to Argument

Appellant first argues that the cited prior art does not disclose lifting. Cahill's carriage discloses that "the stack of articles is first picked up by the overhead cranes" 30 (C6/L75-C7/L1). In addition, Lemelson discloses that the "automatic conveying system 14 may also include means for...lifting and carrying palletized skids 27". C6/L39-40.

In response to Appellants argument that the references fail to show certain features of its invention, it is noted that the features upon which Appellant relies (i.e., "a separate lifter mechanism that is disposed intermediate the crossbeam and overhead support member to lift the entire parcel of goods at once without fear of the legs getting out of alignment") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Cahill does disclose the features recited in claim 19 including lifting units (FIG. 8: 62, 62) mounted to a crossbeam (FIG. 8: 40, 41, 42). Any discontinuities in chain-type lifters is irrelevant because the cited prior art discloses the structure of claim 19 which merely requires the capability of lifting multi-piece goods in a generally vertical direction.

With respect to Lemelson, FIGS. 1-4 clearly disclose support beam 14, 15, 21 extended in to compartment 20. Any reference to a wheel support base (FIGS. 5-6) is irrelevant because the claims merely require extension into a compartment.

In response to Appellants argument that the cited prior art does not disclose "fixed" length legs, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Appellants disclosure did not define fixed and consequently a definition was noted in the Feb. 25, 2008 Final Office Action. "Fixed" is a relative term such that without a frame of reference "fixed" broadly interpreted to mean "stationary" according to one definition in www.dictionary.com. Under the broadest reasonable interpretation Cahill defines fixed length grippers as grippers that do not change in length once a load is gripped. For example, Cahill's legs 54 are certainly fixed to the extent that no length is added after gripping because leg 54 is extended to grip a column, and then moved into clamping position at which time lengthening movement ceases otherwise the gripped load would be set back down on a support surface disabling movement function.

In the alternative, a second broad yet reasonable interpretation is based on a material addition/subtraction. Cahill discloses length to be a portion as defined by segment 56 of leg 54 which is finite, i.e. does not change regardless of whether its lifting or idle; no material is added to Cahill's legs 54. Thus, Cahill's leg lengths are fixed.

In response to Appellants arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. It is the references together which discloses

an obvious combination of well known elements to achieve a known result which is to move unpalletized loads into a transport compartment.

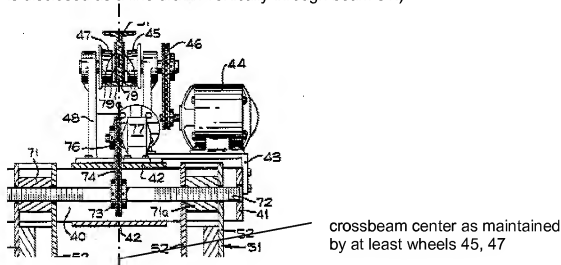
Appellant argues the cited prior art does not disclose conveying units inserted into a transfer compartment. With respect to FIGS. 1-4 Lemelson's conveying units 16 lift and convey full stacks of articles along a unitary traveling support beam 15, 15', 21 into an interior of a transport compartment 20. Specifically, Lemelson discloses that trackways permit "one or more carriers to travel therealong." C1/L37-39. This in combination with Cahill's two conveying units 30, 30 moving along a traveling support beam 31 (FIG. 1: 13, 14) achieves a known result.

Appellant argues that McManus does not disclose a beam that is not fixed, but claim 32 does not recite any limitation or feature which moves support beam. . McManus discloses a lifting cylinder connecting a gripper crossbeam with a support beam. Claim 32 recites "support beam" which Cahill discloses as element 31 so reference to McManus is irrelevant. And, Lemelson discloses a rail 15', 21 which moves into and out of a transport compartment as disclosed in FIGS. 1-4.

In response to Appellants argument that the references fail to show certain features of Appellants invention, it is noted that the features upon which Appellant relies (i.e., keeping the article centered) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Claim 33 recites a crossbeam connected to a support beam for translational movement with respect to the support beam *to center the crossbeam*. (Emphasis added). Cahill's crossbeam 40 translates relative to support beam 31.

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Wheels 45, 47 traverse support beam 31 keeping crossbeam 40 centered (where center is disclosed as a line drawn vertically through beam 31.)



With respect to claim 35, Cahill's legs 54 are movable with respect to each other inasmuch as during clamping, they move towards one another and during release they move away.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Gregory W. Adams, /G. W. A./

Primary Examiner, Art Unit 3652

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